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ABSTRACT

This study examined how firmly formalized institutional effectiveness processes were in place on college campuses and whether those processes were deemed successful and useful by campus communities, noting the effectiveness of Web-based surveying to collect information. Respondents were college administrators involved in their institution's effectiveness plans. All participated in at least one regional or national e-mail listserv or electronic newsletter serving college/university institutional research professionals. Participants received e-mailed information about the Web-based survey, which collected data on institutional characteristics and assessed respondents' opinions on implementation of institutional effectiveness plans, programs, and procedures. Two-thirds of the 324 respondents reported that their campuses had institutional effectiveness plans. Nearly half of the plans were developed collaboratively. Stronger support for the plans related to their being viewed as important and their outcomes being integrated into planning efforts. Academics and administration were the areas most likely to be evaluated. Implementation was most often seen as a job requiring several people. Respondents reported that institutional research offices were charged with implementing the plan. Several technical issues were encountered in collecting data using listservs and Web surveys (e.g., lack of control over who received the communications). (Contains 17 references.) (SM)

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The Effectiveness of Institutional Effectiveness:

Doing an Institutional Effectiveness Survey on the Web

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ABSTRACT

The Effectiveness of Institutional Effectiveness.

Doing an Institutional Effectiveness Survey on the Web

The authors were interested in learning to what extent issues critical to the success of the institutional effectiveness process were addressed and in place at a variety of campuses, and to what extent the institutional effectiveness process was deemed to be successful, useful, and valued by the campus communities. Secondly, the authors were interested in determining the effectiveness of e-mail and Web-based surveying as a mechanism for implementing a paperless communication process. Results suggest a widespread practice of institutional effectiveness among the nation's universities and colleges in ways that encourage broad participation in and ownership of the process among those campus communities.

The Effectiveness of Institutional Effectiveness:

Doing an Institutional Effectiveness Survey on the Web

With the demand for accountability increasing at the nation's colleges and universities, institutional officers are growing more concerned about their ability to meet the high expectations of multiple constituencies. The growing need for limited resources puts increasing requirements on faculty, staff, and administrators to find ways to satisfy the increasingly vigilant constituents. College and university officials are finding students and parents demanding a quality education at affordable prices. At the same time, state and federal agencies are mandating college and university administrators, faculty, and staff to provide data which prove illustrate that they are doing what they say they are doing, as well as how well they are doing their job.

Accreditation agencies such as the Southern Association of Colleges and Schools (SACS) require that all institutions in their accrediting region follow a general evaluation process that documents the evaluation of academic programs and administrative services (Criteria for Accreditation, 1996). This evaluation process is commonly referred to as institutional effectiveness. As a result, many college and university administrators and faculty are implementing institutional effectiveness processes that will assist their respective institutions to evaluate their internal and external effectiveness. However, the extent to which institutional effectiveness is successful and is seen as a useful addition to the campus operation varies from institution to institution. Several researchers have identified a number of indicators which point to the success or failure of institutional effectiveness on a campus. Measurement of the institutional effectiveness efforts currently in practice, based on these indicators, can provide important information for planners and practitioners.

Of secondary interest to the researchers is reviewing the application of current Web technologies to survey research. The interest in paperless data-collection and reporting is a growing phenomenon among institutional research professionals. A number of campuses have developed and implemented Web-based data collection for their internal data needs, while some peer-group consortia share data with each other via Internet and Web-based communication, and many government and professional agencies outside the higher education field are also soliciting campuses for their data via the World Wide Web. The next step for paperless information exchange is on a campus-to-campus level by implementing a traditional use-and-application survey via the Web.

Literature Review

Institutional Effectiveness

A number of institutional research and assessment professionals have examined and defined the concepts of outcomes assessment and institutional effectiveness over the past twenty years. The Council on Postsecondary Accreditation provided an early view of outcomes assessment which they define as "the quality of an educational process relates to (1) the appropriateness of its objectives, (2) the effectiveness of the use of resources in pursuing these objectives and (3) the degree to which objectives is achieved. Without a clear statement of what education is expected to provide, it is not possible to determine how good it is" (1986). During the 1970s and 80s the concept of outcomes assessment was associated primarily with academic measures, and some educators saw a need for a concept more encompassing of the comprehensive range of institutional operations.

The Commission on Colleges of the Southern Association of Colleges and Schools selected the term institutional effectiveness in 1985 as a broader, more representative descriptor of assessment activities beyond traditional academic departments. Grossman and Duncan (1989) stated that institutional effectiveness is the process of articulating the mission of the college, setting goals, defining how the college and the community will know when these goals are being met, and using the data from assessment in an ongoing cycle of planning and evaluation. Alfred and Kreider (1991), however, identified it as the ability of an institution to produce the outcomes it desires in the publics it serves. In 1992 SACS stated that institutional effectiveness "involves a systematic, explicit, and documented comparison of institutional performance to institutional purpose" (Resource Manual on Institutional Effectiveness, p. 2). Recent authors put it in more practical terms. Roueche, Johnson, and Roueche (1997) define institutional effectiveness as "an internal strategy for planning and evaluating the generated data by which the college can determine if it is matching its performance to its purpose or simply as any activity (ies) by which any several key indicators were measured routinely" (p. viii). Roueche, et al.'s definition of institutional effectiveness clarifies the role and purpose of effectiveness on college and university campuses, and points to outcomes strategies as a method to improve the present and future course of institutions of higher education.

Nichols (1995) and Roueche, et al. (1997) have identified a number of issues critical to the success of the institutional effectiveness process on a campus. A successful institutional effectiveness program incorporates many of the following principles and mechanisms: a presidential blessing of and active leadership for the process; broad

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development utilizing many constituents across the campus; adequate resources, including time, staff and equipment; faculty, staff, and administrative buy-in and support; leadership and support from the board of trustees; the campus understanding the process, importance and utility of institutional effectiveness; passion for the process; an understanding and recognition of institutional culture, context, and history; the ability to act on results; internal application of results beyond meeting accreditation requirements; and the ability and willingness to face and encounter change, the ability to utilize existing systems.

The World Wide Web

Part of the reason for the increased focus on surveying via the Web is due to the many advantages this medium offers. A frequently cited advantage is the costs associated with on-line as compared to traditional paper-and-pencil research. Schmidt (1997) found surveying on-line having benefits including "savings in both time and money for survey researchers" (p. 274). He also reported the reduction or elimination for paper resources and elimination of data entry expense and time (p. 275). Gjestland (1996) noted "because all interviews on the Internet are self-administered, there is a tremendous cost savings in not having interviewers" (p. 3). Gaddis reported (1998) that the "relatively low cost of designing and conducting an on-line survey" (p. 67) increases its appeal to researchers.

Other advantages of on-line surveying have been reported. One such benefit is that researchers are not bound by geography (Gjestland, 1996; Smith & Leigh, 1997; Swoboda, Mühlberger, Weitkunat, Schneeweiss, 1997). Smith and Leigh praised the accessibility of the Internet, as well as its potential to transmit a variety of communications including text, images, and sound (p. 496). Davis (1997) agreed with the conveniences or ease of access and added the benefit of "confidentiality of responses" (p. 2).

Another reported benefit has been the ability to archive data resulting from on-line surveys (Smith & Leigh, 1997; Schmidt, 1997). Several studies have applauded the rapid return of instruments when published on-line, which can lead to more rapid analysis (Gaddis, 1998; Gjestland, 1996; Swoboda et al., 1997). Gaddis indicated that, when relying on the Web for surveying, one is also less likely to have "interference from people or institutions that may prevent a survey from being delivered to a respondent" (p.67).

Davis (1997) summed up these points by stating that "Internet surveys are fast, effective, and cost-efficient" (p. 1).

Apprehensions have been voiced that surveys using the Internet invite potentially biased results. Several researchers reported early findings that the majority of Internet users are young, white, educated, males (Gjestland, 1996; Swoboda et al., 1997). In contrast, recent studies have reported that Internet users are becoming more representative of the population as a whole (Georgia Technical Institute's Graphics, Visualization & Usability Center [GVU], 1999; Kaye & Johnson, 1999). However, the Graphics, Visualization and Usability Center's tenth World Wide Web User Survey reported a decrease in the number of female respondents.

Other researchers have addressed concerns of the representativeness of participants from an e-mail survey. Smith and Leigh (1997) reported that analysis of responses from male participants did not show any significant differences across the method of the survey taken. Similarly, whether from the e-mail group or the paper-and-pencil group, female responses did not differ. They concluded, "obtaining similar patterns of responses, despite these differences in sample population, subject selection, survey administration, and testing environments, strongly argues in favor of the generalizability and validity of data collected from Internet subjects and hence the utility of using the Internet as an alternative or supplemental source of subjects" (p. 502). Heflich and Rice (1999) also found their e-mail survey to be "a viable method for obtaining reflective data from participants." Handwerk, Carson and Blackwell (2000) determined "that the demographic and attitudinal profiles of the on-line respondents were not significantly different from the paper-and-pencil respondents" (p. 13).

Purpose and Rationale

The authors were interested in learning to what extent a formalized institutional effectiveness process is in place at a variety of campuses, and to what extent this process was deemed to be successful, useful, and valued by the campus communities. Secondly, the authors were interested in determining the effectiveness of Web-based surveying as a mechanism for implementing a paperless communication process.

Method

Sample

The population of interest for this study is all college and university administrators in the United States who are responsible for or participate in the institutional effectiveness plan/process on their respective campuses during 1999. Since identifying those individuals directly was not practical or realistic, the sampling frame consisted of all participants of at least one of the regional or national e-mail listservs or electronic newsletters serving college/university institutional research professionals during the months of August and September 1999. Because

individual membership lists were not available to the researchers, and cross-membership in multiple listservs is possible, the sample size can only be estimated at about 2,000 persons over the six-week term of the survey.

Measure

The researchers constructed a 23-item survey designed to assess the respondents' opinions with regard to implementation of institutional effectiveness plans, programs and procedures on their campuses. The first four questions consisted of basic descriptors of the institution: student headcount ranges, type of institutional control (public or private) highest degree offered, and regional accrediting body. Remaining questions asked respondents to assess the existing institutional effectiveness plan on their campuses. Areas assessed included: perceived support for/leadership of the institutional effectiveness plan from the chief executive officer, board of trustees, faculty, and staff/administrators; the method of development of the institutional effectiveness plan; dispersal of responsibility for the institutional effectiveness effort; areas of the campus included in the institutional effectiveness effort; the institutional effectiveness cycle; the next regional accrediting body visit; integration of the institutional effectiveness plan into the campus process; communication of results to the general campus; and integration of outcomes into campus planning. The survey concluded with an open-ended comment section.

Design

The researchers used a post-test only non-experiment design for this study. This design can be illustrated with the following notation:

X O

Where:

X = the current state of institutional effectiveness on college/university campuses

O = the measure or observation

This type of design is weak with respect to internal validity and causal assessment, and is best applied to collection of information for describing the current state of a population with regard to the question of concern.

Procedure

The researchers visited the Association Institutional Research (AIR) Website (http://www.airweb.org) to identify listservs or electronic newsletters for the national and each of the regional professional institutional research organizations. In early August 1999, the initial e-mail soliciting participation in the survey was sent to each listserv. Three reminder e-mails were sent out at approximate two-week intervals over the following six-week period. Each

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e-mail described the nature of the research and directed interested participants to the Web address where the survey was located. Due to the nature of listserv administration, it was necessary for the lead correspondent to join several of the listservs to have permission to submit the e-mails. In one instance, a listserv administrator offered to act as an intermediary who received the e-mails at his personal e-mail address, then submitted them to his listserv on behalf of the researchers. At the conclusion of the six-week collection window, the Web address to the survey was re-directed to a "survey closed" Web page.

Results

There were 324 participants in the final sample for this study. Persons working for institutions whose highest degree granted is the associate's degree accounted for 114 (112 from public institutions and 2 from private). Those whose institutions grant bachelor's degrees numbered 24 (3 public, 21 private), and those whose institutions grant graduate degrees accounted for 185 (107 public, 78 private) of the participants.

Participants ranked their institution size, as defined by Fall term student headcount, among one of five size distributions. Eighteen were from institutions of 1,000 and under, 128 with 1,001 to 5,000, 64 with 5,001 to 10,000, 37 from 10,001 to 15,000, and 77 from institutions with 15,000 or more students.

Participants also indicated the regional accrediting body of their institution. The largest number of participants was in the Southern Association (41%), followed by 23% from North Central Association, 15% from Middle States Association, 10% Western, 6% Northwest, and 4% from institutions regulated by the New England Association.

Of all participants, 67% indicated their institutions do have an institutional effectiveness plan in place, 23% do not, and 11% are not certain. Not all institutions have established institutional effectiveness plans. Significant differences ($p < .01$) were found across a couple of descriptive variables. Respondents from public institutions were more likely (χ^2 (2, N = 324) = 12.43) than those from private institutions to reply that they have a plan in place (see Table 1). Differences also arose across highest degree granted by the institution (χ^2 (4, N = 324) = 24.75), with respondents from schools granting associate degrees (82%) far outpacing those from both graduate degree (59%) and bachelor degree (52%) granting institutions in terms of already having a plan established (See Table 2).

When asked to rate the perceived support of their campus institutional effectiveness plan, 87% of respondents stated their chief executive officer supports it, 73% indicated their staff and administration support it,

70% reported their Board of Trustees supports it, and 50% perceived their faculty supports the campus institutional effectiveness plan.

Table 1. Institution control by campus having an institutional effectiveness plan or program in place

Institution control	Row Count	Has IE plan	Does not have IE plan	Not certain
Public	223	73%	18%	9%
Private	99	53%	32%	15%
TOTAL	322	67%	23%	11%

$\chi^2 = 12.4$ (df, N =) $p < 0.01$

Table 2. Highest degree granted by campus has an institutional effectiveness (IE) plan or program in place

Highest degree granted	Row Count	Has IE plan	Does not have IE plan	Not Certain
Associate is highest degree granted	114	82%	16%	3%
Bachelors is highest degree granted	25	52%	40%	8%
Graduate degrees are granted	183	59%	245%	16%
TOTAL	322	67%	23%	11%

Significant difference at $p < 0.01$ level. $\chi^2 = 24.8$

Participants also rated the means by which the institutional effectiveness plan was developed on their campuses. Of those with a plan in place, 46% said it was developed in a collaborative process. The next highest type, 21%, was mostly as a top-down process, 16% reported their campuses used mostly a bottom-up process, 6% said it was primarily a bottom-up process, and 5% replied their campuses employed a primarily top-down mandate to develop their institutional effectiveness plan.

Primary responsibility for implementation of the institutional effectiveness plan was identified as either by institutional committee (41%), one staff or administrator, (15%), administrative committee with no faculty representation (6%), one faculty member (1%), or academic committee (less than 1%). Write-in responses include academic departments, associate/assistant deans, and president's council.

Respondents rated four general categories of campus areas included in the institutional effectiveness plan. Academic departments are most likely to be included (77%), while administration is included in the evaluation

process of 64% of respondents, support staff by 57%, and operations/maintenance are included by 56% of respondents.

Respondents rated their campus for general attitude toward institutional effectiveness. The majority reported their campuses having mixed (35%), or welcoming/positive (32%) attitudes toward institutional effectiveness. Those perceiving a cynical/hostile attitude on their campuses accounted for 17% of respondents, and 15% stated there is a neutral attitude with regard to institutional effectiveness on their campuses.

Campus attitude toward institutional effectiveness and perceived total support for it was significantly related ($p < .001$). Campuses rated for broader support were more likely (χ^2 (8, N = 97) = 50.01) to also be rated having a welcoming or positive attitude toward the institutional effectiveness process (See Figure 1).

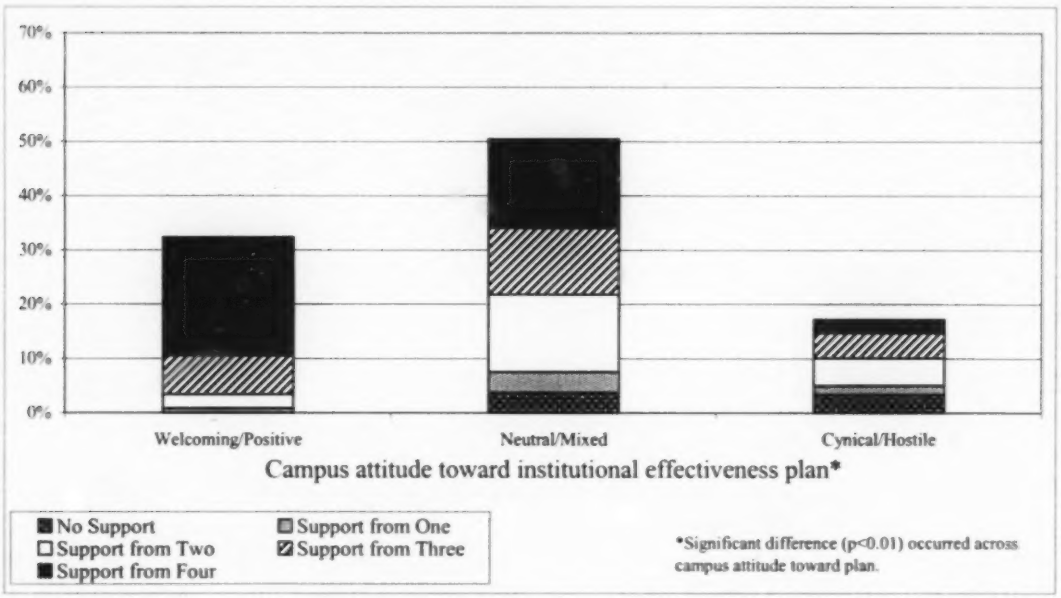

Figure 1. Campus attitude toward institutional effectiveness plan by support of President/Chancellor, Board of Trustees, faculty, and staff/administration.

Respondents rated how integral the institutional effectiveness plan is to the campus process. The majority (40%) saw it as a mix between being a tool for internal improvement and an administrative task. Those rating the plan mostly as a tool for internal improvement numbered 25%, and those rating it mostly as an administrative task

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comprised 16%. Extreme ends of the scale showed 10% viewing it primarily as a tool for internal improvement, followed closely by 9% rating it primarily as an administrative task.

Significant differences were found for perceived support of the institutional effectiveness plan and degree to which the plan was integral to the campus process ($p < .001$). Respondents who rate their campuses with broader support were more likely (χ^2 (8, N= 249) = 62.78) to rate the institutional effectiveness plan as being mostly or primarily a tool for internal improvement (See Figure 2).

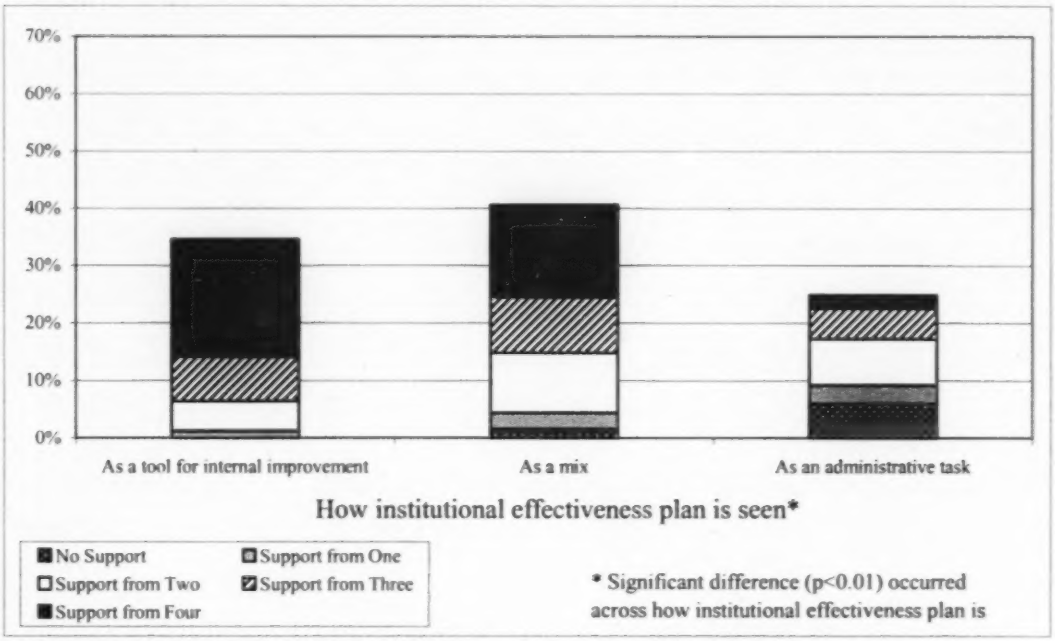

Figure 2. How integral the institutional effectiveness plan is to the campus process by support of President/Chancellor, Board of Trustees, faculty, and staff/administration.

The results from the institutional effectiveness process were communicated to the campus using a variety of means. The most common single method was in a newsletter published by the institutional effectiveness committee (14%), followed by Web page updates (11%) presidential memo (9%) and e-mail announcements (6%). Other methods used were reports, meetings, presentations, and combinations of the above.

Respondents rated the level of integration of the institutional effectiveness plan into the campus process, with 61% believing it has some integration on their campuses, 29% believing it has low integration, and 10% believing it has high integration on their campuses. When cross-tabulated for level of support, significant

differences ($p < .001$) were noted. Campuses with broad support were more likely (χ^2 (8, N= 249) = 65.34) to have the institutional effectiveness plan highly integrated into their campus process (See Figure 3).

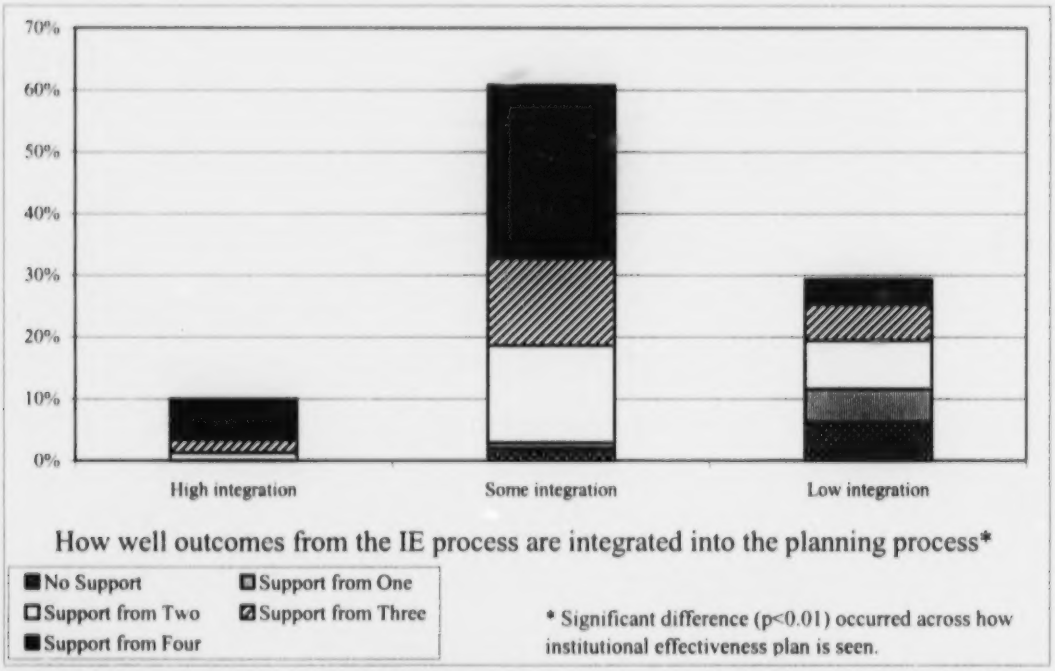

Figure 3. How well outcomes from the institutional effectiveness process are integrated into the planning process by support of President/Chancellor, Board of Trustees, faculty, and staff/administration.

Discussion

Two-thirds of respondents report an institutional effectiveness plan in place on their campuses, with nearly half the plans developed as a collaborative effort on the campuses. This finding suggests a widespread practice of institutional effectiveness among the nation's universities and colleges in ways that encourage broad participation in and ownership of the process among those campus communities. Such practice underscores the objective that institutional effectiveness be a long-term endeavor important and integral, rather than separate or unrelated, to the operations of the campus.

Higher support for the institutional effectiveness plan goes hand-in-hand with it being viewed as important to the campus internally. In addition, broad support for the institutional effectiveness plan relates strongly with

more positive attitudes about it, and with its outcomes being integrated into planning efforts. These findings suggest the continued use and successful application of institutional effectiveness may hinge upon it being an organic development of within the context of the campus needs and operations.

Academics and administration lead in areas likely to be evaluated. Review of support staff and operations/maintenance, however, are reported by over half of respondents. The results here are not entirely surprising in that assessment activities have historically been focused on academic areas. What is interesting is the growing percentage in other areas not known for these kinds of activities—namely in the support staff and operations/maintenance. The rather high percentage is indicative of the increasing demands for accountability and the continued mandates by accrediting agencies for institutional effectiveness, meaning assessment and evaluation processes across the spectrum of the institution.

The implementation of institutional effectiveness plans is most often seen as a job requiring the attention of more than one individual. Once the plans are created, it is often up to a committee or group to implement them. The majority of respondents with institutional effectiveness plans indicate either that a formal institution-wide committee, a more narrowly arranged committee, or an informal grouping of professionals are most likely to be responsible for implementation of the plan. Very few respondents report that the responsibility for discharging of the plan is placed in the hands of one single individual. Perhaps the scope of the plans, which often evaluate academic areas, administration, staff and operations are too broad to be comfortably executed by a lone manager.

It is also interesting to note that only a handful of respondents report that institutional research offices are charged with the responsibility of carrying out the plan at their institutions. The role of institutional research offices in the development and implementation of institutional effectiveness plans was not specifically addressed in the instrument and could be a focus of future research. However, since invitations to participate in this study were sent to subscribers of regional institutional research associations and the majority of titles supplied by participants contained "institutional research," it may safely be assumed that institutional research professionals are, at a minimum, aware of the institutional effectiveness plans on their campuses.

The researchers encountered several technical issues surrounding the specific method of data collection utilizing listserv communication and the Web form. Following the initial contact, two respondents requested that they not receive the e-mail reminders and five had problems accessing the Web page to complete the survey. One disadvantage to using listservs for communication is that researchers cannot control who does or does not receive

the communications. Such lack of control might induce ill will among participants. When possible, it would be best for the researcher to acquire direct lists of e-mail addresses so that individual communication and participation can be controlled. With regard to Web page access, it is important the Web-form designer be familiar with as many Web-browsers and computer configurations as possible and have contingency plans so the interested participant can complete the survey even if his or her browser is incompatible. Such contingencies can include directing the participant to try another Web-accessible computer, making a downloadable form available for the participant to return via file transfer protocol (FTP) or e-mail, or to send an e-mail version of the survey for the participant to complete. Positive outcomes of the Web-form collection included three respondents complimenting the speed and ease-of-use of the survey, and relevant application of the technology.

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